

## CLAIMS

1. An apparatus for continuous dissolution which comprises a dissolution portion for dissolving a gas into a main stream liquid, the apparatus  
5 further comprising a flow meter which measures a flow rate of the main stream liquid and outputs a signal of a value obtained by the measurement, a mechanism for controlling a flow rate which controls an amount of supply of the gas based on the signal input from the flow meter and an apparatus for degassing the main stream liquid which is disposed  
10 at a position at an upstream of the dissolution portion for dissolving a gas.
2. An apparatus for continuous dissolution according to Claim 1, wherein the main stream liquid is pure water or ultra-pure water.
- 15 3. An apparatus for continuous dissolution according to Claim 2, which comprises a means for injecting an other liquid into the main stream liquid and controls an amount of addition of the other liquid based on the signal.
- 20 4. A process for continuous dissolution which comprises continuously dissolving a gas or a gas and an other liquid into a main stream liquid, wherein the main stream liquid is degassed before the gas is dissolved and an amount of supply of the gas or amounts of supply of the gas and the other liquid are controlled based on a flow rate of the main stream liquid  
25 before the degassing or after the degassing.

5. An apparatus for supplying water containing a dissolved gas which comprises:

a portion for producing the water containing a dissolved gas comprising:

5 an apparatus for dissolving a gas which comprises a flow meter measuring a flow rate of pure water or ultra-pure water and outputting a signal of a value obtained by the measurement and a mechanism for controlling a flow rate which controls an amount of a gas to be dissolved into the pure water or the ultra-pure water based on the  
10 signal input from the flow meter, and

a means for adjusting an amount of water which adjusts an amount of the pure water or the ultra-pure water supplied to the apparatus for dissolving a gas, and

a portion for supplying the water containing a dissolved gas  
15 comprising:

a water tank which receives the water containing a dissolved gas in an excess amount which is not used at a point of use,

a piping system through which the water containing a dissolved gas flows from the water tank towards the point of use and the  
20 water containing a dissolved gas in an excess amount returns to the water tank, and

a piping for supplying the water containing a dissolved gas which supplies the water containing a dissolved gas obtained in the portion for producing the water containing a dissolved gas to the water  
25 tank; and

controls the means for adjusting an amount of water based on a water

level in the water tank.

6. An apparatus for supplying water containing a dissolved gas according to Claim 5, wherein the water tank is a water tank of a sealed type equipped with a portion for supplying a sealing gas and the sealing gas is a same gas as the gas dissolved in the water containing a dissolved gas.